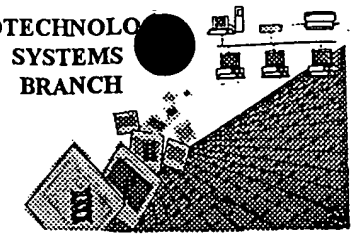
BIOTECHNOLOGY SYSTEMS BRANCH



#6

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/538,129
Source: PCT
Date Processed by STIC: 06/16/2005

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):** U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

Raw Sequence Listing Error Summary

ERROR DETECTED **SUGGESTED CORRECTION** SERIAL NUMBER: 10/538,129

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n/Xaa	"n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid

PCT

RAW SEQUENCE LISTING DATE: 06/16/2005
PATENT APPLICATION: **US/10/538,129** TIME: 10:23:26

Input Set : **A:\PG5044 seq list.txt**
Output Set: **N:\CRF4\06162005\J538129.raw**

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      4 <110> APPLICANT: Catchpole, Ian
      6 <120> TITLE OF INVENTION: Vaccine
      8 <130> FILE REFERENCE: PG5044
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/538,129
C--> 11 <141> CURRENT FILING DATE: 2005-06-06
     13 <150> PRIOR APPLICATION NUMBER: GB 0228540.1
     14 <151> PRIOR FILING DATE: 2002-12-06
     16 <160> NUMBER OF SEQ ID NOS: 21
     18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     20 <210> SEQ ID NO: 1
     21 <211> LENGTH: 20
     22 <212> TYPE: DNA
     23 <213> ORGANISM: Artificial Sequence
     25 <220> FEATURE:
     26 <223> OTHER INFORMATION: Artificial sequence
     28 <400> SEQUENCE: 1
     29 tccatgacgt tcctgacgtt                                          20
     31 <210> SEQ ID NO: 2
     32 <211> LENGTH: 14
     33 <212> TYPE: DNA
     34 <213> ORGANISM: Artificial Sequence
     36 <220> FEATURE:
     37 <223> OTHER INFORMATION: Artificial sequence
     39 <400> SEQUENCE: 2
     40 ggaaggaagg aagg                                                14
     42 <210> SEQ ID NO: 3
     43 <211> LENGTH: 34
     44 <212> TYPE: DNA
     45 <213> ORGANISM: Artificial Sequence
     47 <220> FEATURE:
     48 <223> OTHER INFORMATION: Artificial sequence
     50 <400> SEQUENCE: 3
     51 tccatgacgt tcctgacgtt ggaaggaagg aagg                          34
     53 <210> SEQ ID NO: 4
     54 <211> LENGTH: 20
     55 <212> TYPE: DNA
     56 <213> ORGANISM: Artificial Sequence
     58 <220> FEATURE:
     59 <223> OTHER INFORMATION: Artificial sequence
     61 <400> SEQUENCE: 4
     62 tccatgacgt tcctgacgtt                                          20
     64 <210> SEQ ID NO: 5
     65 <211> LENGTH: 18
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Does Not Comply
Corrected Diskette Needed
(pg 1-4)

What is the genetic Source of Material.

Invalid Response
See Item # 11 in Summary Sheet.

Same Error

Same Error

Same Error

RAW SEQUENCE LISTING DATE: 06/16/2005
PATENT APPLICATION: US/10/538,129 TIME: 10:23:26

Input Set : A:\PG5044 seq list.txt
Output Set: N:\CRF4\06162005\J538129.raw

66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial Sequence
69 <220> FEATURE:
70 <223> OTHER INFORMATION: Artificial sequence
72 <400> SEQUENCE: 5
73 tctcccagcg tgcgccat 18
75 <210> SEQ ID NO: 6
76 <211> LENGTH: 30
77 <212> TYPE: DNA
78 <213> ORGANISM: Artificial Sequence
80 <220> FEATURE:
81 <223> OTHER INFORMATION: Artificial sequence
83 <400> SEQUENCE: 6
84 accgatgacg tcgccggtga cggcaccacg 30
86 <210> SEQ ID NO: 7
87 <211> LENGTH: 20
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Artificial sequence
94 <400> SEQUENCE: 7
95 tccatgacgt tcctgatgct 20
97 <210> SEQ ID NO: 8
98 <211> LENGTH: 13
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Artificial sequence
105 <400> SEQUENCE: 8
106 ctctctctct ctc 13
108 <210> SEQ ID NO: 9
109 <211> LENGTH: 14
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Artificial sequence
116 <400> SEQUENCE: 9
117 ccttccttcc ttcc 14
119 <210> SEQ ID NO: 10
120 <211> LENGTH: 13
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Artificial sequence
127 <400> SEQUENCE: 10
128 gagagagaga gag 13
130 <210> SEQ ID NO: 11
131 <211> LENGTH: 11
132 <212> TYPE: DNA

RAW SEQUENCE LISTING DATE: 06/16/2005
PATENT APPLICATION: US/10/538,129 TIME: 10:23:26

Input Set : A:\PG5044 seq list.txt
Output Set: N:\CRF4\06162005\J538129.raw

SAME errors

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133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Artificial sequence
138 <400> SEQUENCE: 11
139 ctctctctct c                                                    11
141 <210> SEQ ID NO: 12
142 <211> LENGTH: 18
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Artificial sequence
149 <400> SEQUENCE: 12
150 ctctctctcc tctctctc                                             18
152 <210> SEQ ID NO: 13
153 <211> LENGTH: 11
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Artificial sequence
160 <400> SEQUENCE: 13
161 ctctctctct c                                                    11
163 <210> SEQ ID NO: 14
164 <211> LENGTH: 34
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Artificial sequence
171 <400> SEQUENCE: 14
172 tccatgacgt tcctgacgtt tgagagagag agag                            34
174 <210> SEQ ID NO: 15
175 <211> LENGTH: 34
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Artificial sequence
182 <400> SEQUENCE: 15
183 tccatgagct tcctgagtct tgagagagag agag                            34
185 <210> SEQ ID NO: 16
186 <211> LENGTH: 13
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Artificial sequence
193 <400> SEQUENCE: 16
194 gagagagaga gag                                                  13
196 <210> SEQ ID NO: 17
197 <211> LENGTH: 20
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
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RAW SEQUENCE LISTING DATE: 06/16/2005
PATENT APPLICATION: **US/10/538,129** TIME: 10:23:26

Input Set : **A:\PG5044 seq list.txt**
Output Set: **N:\CRF4\06162005\J538129.raw**

same errors

201 <220> FEATURE:
202 <223> OTHER INFORMATION: Artificial sequence
204 <400> SEQUENCE: 17
205 tccatgagct tcctgagtct 20
207 <210> SEQ ID NO: 18
208 <211> LENGTH: 35
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Artificial sequence
215 <400> SEQUENCE: 18
216 tccatgacgt tcctgacgtt tggaaggaag gaagg 35
218 <210> SEQ ID NO: 19
219 <211> LENGTH: 35
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Artificial sequence
226 <400> SEQUENCE: 19
227 tccatgagct tcctgagtct tggaaggaag gaagg 35
229 <210> SEQ ID NO: 20
230 <211> LENGTH: 35
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Artificial sequence
237 <400> SEQUENCE: 20
238 aggatgacgt tggagacgtt tggaaggaag gaagg 35
240 <210> SEQ ID NO: 21
241 <211> LENGTH: 35
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Artificial sequence
248 <400> SEQUENCE: 21
249 aggatgagct tggagagtct tggaaggaag gaagg 35

VERIFICATION SUMMARY DATE: 06/16/2005
PATENT APPLICATION: **US/10/538,129** TIME: 10:23:27

Input Set : **A:\PG5044 seq list.txt**
Output Set: **N:\CRF4\06162005\J538129.raw**

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date